

Patent Application of Kenichi K. Yabusaki

A Container For Storing Split Shot

BACKGROUND OF THE INVENTION

5 Field of the Invention

This invention pertains to a container which is useful to fisherpersons for storing used pieces of split-shot during a fishing session.

Description of the Prior Art

10 The invention addresses a common problem faced by fly fisherpersons. Slotted weights, such as split shot, are commonly used in fly-fishing to weight the leading end of a fishing line so that the end will sink to the desired depth. Split shot is applied by placing the fishing line into the slot and then crimping the slot closed with a tool such as a long nose pliers, forceps, or the like. Split shot is typically made of lead and has a football like or
15 spherical shape with a roughly elliptical cross section. Split shot is available in a number of popular sizes ranging from a minor axis in the range of about 3-mm to about 6-mm. The shot is removed by reopening the slot by prying it open.

Shot is often added and removed from a fishing line many times during a fishing session to
20 accommodate changing water conditions and depth at which fish are biting. Fisherpersons are frequently ecologically minded and do not desire to pollute the water where they are fishing with lead shot or risk having fish or other animals ingest the shot. Also, it is possible to reuse shot if used shot were stored in a convenient container.

25 Some of the desirable properties of a container for split shot include having a convenient size for carrying a reasonable quantity of shot, having a convenient closure through which shot is easily added and which protects escape of shot once in the container, providing visibility of the different pieces shot in the container and the ability to identify and remove a desired shot for use or reuse, and providing the ability to hang the container from a

fisherperson's vest or lanyard type device in a position such that the shot does not fall out of the container.

U.S. Patent 6,273,309 to Oppelt is one example of a Fisherman's Trash Receptacle and Fly Rig Holder. This patent discloses a cylindrical container closed at one end and open at the other that is wrapped with Velco or foam material. The container is equipped with a hinged lid that is provided with cross slits providing access to the container.

The container is also equipped with a clip means on the closed (bottom) end of the container whereby the container may be attached to a fly fisherman's vest by the clip with the lid facing downward. The container is used as a trash receptacle for storing unwanted leader, flies, shot weights, and other small items. The outside of the container covered by Velco or foam can be used for wrapping a dropper fly rig or fishing line.

U.S. 6,273,309 is a convenient receptacle for a fisherperson that provides some of the desirable features of a split shot storage device. However this and other general purpose containers do not adequately meet the needs for a split shot storage container.

There is a need for a shot storage container that has a convenient size and shape for storing shot.

There is a need for a shot storage container that includes a closure that allows for convenient addition of shot to the container and also that retains shot securely inside the container.

There is a need for a shot storage container that allows for visibility of the shot therein to identify a piece for reuse and ability to conveniently remove an identified piece.

There is a need for a shot storage container that can be conveniently hung from a fisherperson's fishing vest or lanyard device while retaining the shot securely therein.

SUMMARY OF THE INVENTION

It is an object of the invention to provide a shot storage container that is an improvement over the prior art and that satisfies one or more of the identified needs. It is a further object to provide a container that is also suitable for storage of other small items.

The invention is a container that is suitable for storage of split shot or other small items and intended to be easy to use in a busy circumstances of a fly fisherperson.

One aspect of the invention is a container including:

- a. an elongate receptacle having a closed bottom wall, a top opening, and a body between the closed bottom wall and the top opening, the body including a smooth outer surface, whereby a cavity is defined within the elongate receptacle, and
- b. a pliable and resilient elongate closure having an open end, a closed end, and a tubular body, said elongate closure being sized such its open end fits over the open top of the elongate receptacle to frictionally engage the body of the elongate receptacle, said tubular body having at least one slit passing through the tubular body providing access to the cavity within the receptacle.

In a preferred embodiment of the invention the elongate receptacle has a generally cylindrical shape, and more preferably is a small glass bottle such a one-dram bottle. The bottle has a threaded top section that has a slightly reduced diameter compared to the remainder of the cylindrical part of the bottle, though other bottles can certainly be used. A preferred closure is made from an elongate piece of soft plastic tubing which is sealed closed at one end while the other end fits tightly on the smooth outer surface of the cylindrical body of the bottle making a frictional seal between the pliable plastic tubing and the body of the bottle. Examples of acceptable tubing are Tygon and Silicon tubing. The tubing has at least one slit, or preferably a plurality of intersecting slits and more preferably three intersecting slits on the side of the tubing providing access to the bottle. The closure adheres to the bottle strongly in ordinary usage, but can be readily pulled apart to separate the closure from the bottle. The preferred closure has an aperture in the

sealed closed end of the tube, through which a clip or ring can be attached to mount the closure and bottle for instance to a retractor chord attached to a fisherperson's vest or lanyard device.

5 Another aspect of the invention is a closure for small bottles, wherein a closure may be used with a sequence of bottles. This aspect would be particularly advantageous for a user who had a supply of bottles and wishes to use the bottles and then remove and cap them and place another bottle in the closure. A closure according to this aspect is as described above as the closure portion of a container. Different sized closures are supplied for
10 different bottles.

A unique feature of a container according to the invention is that the closure of the container is an elongate tube with one or more slit openings on the side of the tube. This allows a user to mount the container (closure plus receptacle) by the top of the elongate
15 tube with the container upright position with the slits on a vertical side. Fisherpersons often wish to attach their equipment to an elastic retractor cord that can be attached to a vest or lanyard device.

BRIEF DESCRIPTION OF THE DRAWINGS

20 These and other features, aspects and advantages of the present invention will become better understood with regard to the following description, appended claims and accompanying drawing, where:

Figure 1 shows a perspective drawing of a preferred embodiment of a container including a closure and receptacle bottle.

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DESCRIPTION OF THE PREFERRED EMBODIMENTS

The invention pertains to a container for storing split shot or other small items and is particularly intended for use in fly-fishing.

30 One embodiment of the invention is a container including a receptacle and a closure.

Both receptacle and closure preferably have an elongate cylindrical shape with roughly circular cross section, though it is not necessary that either be a perfect cylinder.

Figure 1 shows one preferred embodiment of the invention a container 10, including a
5 tubular closure 11 and an elongate receptacle 13. The receptacle 13 has a bottom wall 26,
a top opening 23, and a generally cylindrical body 12 between the top opening and the
bottom wall, the generally cylindrical body has a smooth outer surface and an optional
threaded section 15. The optional threaded section has a diameter slightly smaller in
diameter than the remainder of the generally cylindrical body. A cavity 30 is defined within
10 receptacle 13. Split shot 24 is shown stored in the cavity. The closure 11 has an open end
17, a closed end 19, and a tubular body 14 between the open end and the closed end. The
open end 17 of the closure fits tightly over and frictionally engages the generally
cylindrical body 12 of the receptacle 13 on the smooth outer surface. The closure defines
at least one slit through its tubular body, here three intersecting slits 16, 18, and 21. The
15 closed end 19 of closure 11 defines an aperture 20 to which is attached clip or ring 22.

In the preferred embodiment, the receptacle is an ordinary 1-dram clear glass bottle which
is an ideal size for split shot. The closure in this embodiment is made from a ½ inch
diameter, 1/16 inch thickness soft Tygon tubing, to snugly fit the 1-inch outside diameter
20 of the 1-dram bottle when stretched over it. It is highly preferable to use thick, soft, plastic
tubing because it will be very long lasting and will not stretch out of shape in the manner
of thin plastic often used for container caps. The plastic tubing is preferably sealed closed
at the top by thermal treatment as with a hot iron, though it may be held closed by other
means such as a clamp. Slits are cut through the side wall of the tubing, preferably a pair
25 of intersecting slits, more preferably three intersecting slits. The fabrication of the plastic
closure is conventional and well known to those skilled in the art.

It will be apparent by those skilled in the art that the receptacle may be of different sizes
and need not be made from glass. A plastic receptacle would be acceptable, preferably a
30 hard plastic bottle. A metal receptacle would also be acceptable, except that a transparent

receptacle is preferred so that it is possible to examine the contents, for instance to choose a used piece of shot for reuse.

While the preferred embodiment of the invention has been shown with a receptacle which
5 has a generally cylindrical body having a circular cross section, it should be understood
that as used within this application, "cylindrical" is used in the broad sense of a hollow
solid figure, characterized as having a base and a body, wherein the body has a cross
section that is the same as the cross section of the base. Thus a receptacle such as shown
in Figure 1, with a square or rectangular cross section comprises a generally cylindrical
10 body as used herein. Similarly, the tubular closure has a shape and size that fits over and
engages the receptacle, and "tubular" is used herein to include cross sections other than
circular such as square or rectangular.

Another aspect of the invention is a closure for bottles. A closure is exactly like the
15 closure portion of the container in Figure 1, and is adapted to fit standard sized bottles
such as a 1-dram bottle. A user would use a closure with several bottles, perhaps filling a
first bottle, then removing and capping it, and attaching a second bottle to the closure.
Thus in this aspect of the invention several bottles could be matched with one closure.

20 The closure is used by forming a container by fastening the closure to a receptacle so that
the open end of the closure is a snug frictional fit to the receptacle. Small articles are
pushed through the slits and fall into the cavity of the receptacle where they are retained
therein. Preferably the container is hung by attaching the aperture or the clip or ring to a
hook on an elastic retractor which is attached to a fisherperson's vest or lanyard device.
25 Thus the container is stored with the closure with the slit openings above the receptacle so
that the shot or small items stored therein are safely retained. The use of an elongate
closure with slits on the side thereof is, thus, an improvement over the prior art caps with
slits.

It is seen that the invention provides a shot storage container that has a convenient size and shape for storing shot, includes a closure that allows for convenient addition of shot to the container and also that retains shot securely inside the container, allows for visibility of the shot therein to identify a piece for reuse and ability to conveniently remove an
5 identified piece, and can be conveniently hung from a fisherperson's fishing vest or lanyard device while retaining the shot securely therein.

Although the present invention has been described in considerable detail with reference to certain preferred versions thereof, other versions are possible. Therefore the spirit and
10 scope of the appended claims should not be limited to the preferred versions herein.